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ABSTRACT

This paper reviews selected literature pertaining to merit pay, differentiated staffing, and incentive pay programs. The first section reviews the history of these alternatives to the single salary schedule, beginning with an account of two experimental merit pay plans in the early 20th century. During the 1920s, merit pay plans gave way to the single salary system in an effort to end the salary discrepancies between elementary and secondary school teachers, but the interest in alternatives to the single salary schedule was revived in the early 1960s, when the concept of differential staffing was introduced in California. The second section reviews the content of proposed and existing plans from 1980 on. Incentive pay programs provide bonus payments to promote teaching as a rewarding career and to help meet district goals. Examples of incentive pay programs in Florida, Houston (Texas), and Minnesota are described, with special attention to Houston's "Second Mile Plan." Differential staffing or career ladder programs are then described, including the Florida Merit Compensation Program, the California Mentor Teacher Program, and the Tennessee Master Teacher Program, along with the Charlotte-Mecklenburg Schools Career Development Plan. Finally, arguments for and against straight merit pay plans are reviewed, and examples of such plans in California and Arizona are cited. The final section discusses the controversy surrounding attempts to define teacher excellence. (TE)

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Review of Related Literature and Research

History of Merit Pay, Differentiated Staffing, and Incentive Pay Programs

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EA 018 325

REVIEW OF RELATED LITERATURE AND RESEARCH

History of Merit Pay, Differentiated Staffing, and Incentive Pay Programs

Since the early nineteen hundreds, educators developed a variety of alternatives to the single salary schedule. Those alternatives were designed to compensate effective classroom teachers and to attract competent teachers to the profession. Those concepts were illustrated by Dutton and Snedden who wrote:

What is evident with regard to the salaries of teachers in most American communities is that they are too low to enable the teaching profession to develop as it should. Doubtless at any given moment, a marked increase in salaries would not greatly affect the efficiency of the teaching force; but nonetheless certainly, an advanced scale of salaries maintained in the face of competition would soon tend to draw into the profession men and women of better natural qualifications, better preparation, and more willingness to devote themselves persistently and professionally to their work.¹

Many school systems experimented with the merit pay concept. During 1904, Greenwood developed a merit plan for elementary and secondary teachers in Kansas City, Missouri. An annual salary increase contingent upon the successful completion of yearly examinations

¹Samuel Train Dutton and David Snedden, Administration of Public Education in the United States (New York: MacMillan Company, 1916), p. 263.

was called for in the plan.² Greenwood stated:

The real problem . . . was to devise some tests by which the most progressive and efficient teachers could be taken out and put into a class by themselves and be paid according to their temper towards the children, their disposition to improve continuously, and the character of their work measured by proper educational values.³

Teachers who elected to participate in this voluntary merit pay system were required to increase their knowledge and skill in history, philosophy, and the theory and practice of education.⁴ The Kansas City School Board declared this plan a success because it inspired the participants to pursue college educations.⁵

MacDowell maintained that teacher salaries should not be fixed. Rather, efficiency should be the key for those who have "professional spirit."⁶ A teacher's salary was to be based on length of service and instructional improvement. The length of service allowed for demonstrated improvement to occur in such areas as classroom efficiency and continued study. MacDowell defined

²J.M. Greenwood, "An Experience in Helping Teachers Professionally," Educational Review, 30 (1905), 468.

³Greenwood, p. 464.

⁴Greenwood, p. 467.

⁵Greenwood, p. 473.

⁶Theodore MacDowell, "An Outline of a Plan for Utilizing the Salary Schedule As a Means for Improving The Efficiency of Teachers In The Public Elementary Schools," Education Review, 37 (1909), 351.

classroom efficiency as the following:

Personality, cooperation, teaching technique, disciplinary power, sympathetic relation of teachers and class, and all similar points which supervisory officers might determine upon as being vital to the best interests of the children.⁷

MacDowell proposed four requirements which, upon their completion, would pass the teacher into higher salary divisions. The requirements for division one included a provisional teaching certificate and an appointment by the local school board to a full-time teaching position. A teacher would remain in division one for three years. During that time period, the teacher received extensive supervision with constructive criticism. Division one was considered a crucial time for teacher growth and development. For the second requirement, during which the teacher progressed into division two, the teacher prepared and defended a written essay dealing with a contemporary school issue. The essay was to include a list of references and was to be presented to the local school board. To fulfill the requirements for division three, a teacher had to complete one of the following: pass a written examination on an academic or professional subject; complete a predetermined number of extension courses in an academic or professional subject; or complete a specific number of college courses in an academic

⁷MacDowell, pp. 352-353.

or professional subject. Additional examinations or satisfactorily completed course work were required for division four salary increments.⁸

During the 1920's, merit pay plans gave way to the single salary system in an effort to end the salary discrepancies between elementary and secondary school teachers. The single salary schedule remained the most frequently practiced method.⁹

The interest in alternatives to the single salary schedule was revived during the early 1960's. Patterson advocated teacher ranking, a form of differentiated staffing:

One of the most controversial aspects of education's fight for professionalism is the determination of salaries which would not only be adequate, but which would reward professional performance and competence.¹⁰

Patterson believed that the privileges and financial rewards of teacher ranking would alleviate high teacher turnover, would insure quality teaching, and would entice highly qualified individuals to join the profession. He proposed a teacher ranking order to include a teacher aide, an assistant teacher, a regular teacher, a senior teacher, and a master teacher. According to Patterson,

⁸MacDowell, pp. 353-355.

⁹Jordon and Borkow, p. 10.

¹⁰Wade N. Patterson, "Teacher-Ranking: A Step Toward Professionalism," Educational Forum, 33 (1968/69), 169.

a plan of teacher ranking was justified only when a teacher worked year-round and was career oriented.¹¹

A differentiated staffing plan similar to Patterson's teacher ranking plan was developed for teachers of the Temple City School System in Temple City, California. An attempt was made through this plan to increase teacher autonomy and to provide career advancement by distinguishing between teaching roles and responsibilities.¹² At the highest level of this career ladder was the master teacher. The master teacher had great expertise in at least one subject area. The position required someone with a broad knowledge of teaching methodology, learning theory, and curriculum theory. At least three-fifths of the master teacher's duties included direct instruction.¹³ In addition, the master teacher served as a research consultant informing other teachers of current instructional innovations.¹⁴ The Temple City differentiated staffing plan encountered several difficulties. These included: the need for flexible scheduling;

¹¹Patterson, pp. 170-171.

¹²John M. Rand and Fenwick English, "Towards A Differentiated Teaching Staff," in The Management of Educational Personnel, ed. Tonis Romand et al. (New York: MSS Information Corporation, 1968), p. 152.

¹³Dempsey and Smith, p. 188.

¹⁴Dempsey and Smith, p. 21.

the resistance of elementary level teachers; the objection of women but not men to the plan; and the discomfort of administrators with sharing what were perceived to be administrative duties.¹⁵ After four years of implementation, the program was discontinued because of a lack of financial support.

During 1978, the Educational Research Service (ERS) conducted a national survey of 11,502 school districts with a student enrollment of 300 pupils or more to determine each district's past or present policy regarding merit and/or incentive pay plans. The ERS received 2,848 usable replies. In Virginia, 131 school systems were surveyed with 48 of those systems responding. This comprised 36.6 percent of the total responses for the state.¹⁶ It was determined from this survey that during the 1977-78 school year, the Prince Edward County School System as well as the Virginia Beach School District had a merit pay plan for teachers. It was also indicated that Arlington City Schools had a merit salary schedule but discontinued the plan during the early 1960's.¹⁷

It was further concluded that 139 of the total national respondents reported to have had merit pay plans

¹⁵Rand and English, p. 157.

¹⁶Merit Pay for Teachers, Educational Research Services, Arlington, Virginia, 1979, pp. 30-31.

¹⁷Merit Pay for Teachers, p. 38.

in the past but had discontinued them. The mean duration of those plans was six years with one-third of those plans terminated after only two years.¹⁸

Specific reasons for the failure of merit pay and incentive pay plans were provided. The ERS determined that administrative reasons accounted for 40.2 percent of the failed plans. Additional causes were reported as personnel (38.4 percent), collective bargaining (18.0 percent), financial problems (16.7 percent), and other problems (5.9 percent).

Additional factors contributing to the failure of merit pay plans were described by Rhodes. Insufficient discrimination among teachers as well as artificial cutoffs and poorly trained evaluators were flaws in many of the plans. Likewise, mistaken concepts by board members and administrators, a lack of clearly understood goals, poorly defined job descriptions, and a lack of prioritization of job responsibilities further undermined the success of the plans. Finally, Rhodes claimed that inadequate evaluation procedures, the inability to translate evaluations into improved instruction, as well as the limited concept of merit and inadequate financial incentives further destined merit pay to failure.¹⁹

¹⁸Merit Pay for Teachers, p. 39.

¹⁹Eric Rhodes, Merit Pay-Where We Stand (ERIC ED 089 419), pp. 3-4.

It was stated within the literature that to develop a successful merit pay plan specific prerequisite criteria had to be followed. MacDowell claimed that merit pay plans should be founded on their ability to improve instruction. The development of any merit pay plan must allow for input from teachers, administrators, the school board, and the community. Trust and honesty must exist among those individuals involved with the plan. There should be no limit to the number of personnel who could participate in merit pay plans.²⁰ McKenna added that before any merit salary program can begin, thorough research must be conducted to identify potential problem areas.²¹ Rhodes concluded that school boards should assist in the initial policy making phase exclusively. Further interference from the board of education would only undermine the authority of school administrators.²²

²⁰Stirling McDowell, Accountability of Teacher Performance Through Merit Salaries and Other Devices (ERIC ED 055 989), pp. 16-18.

²¹Charles McKenna, "Merit Pay? Yes!," National Elementary Principal, 52 (1973), 71.

²²Eric Rhodes, Making Merit Pay Work (ERIC ED 089 419), p. 46.

Content of Proposed and Existing Plans

During the early 1980's, there were several alternatives to the single salary schedule. These plans were either proposed programs or were plans which were actively in force. They were under consideration at both the state and local levels throughout the United States. One of these alternatives was incentive pay. This form of salary reimbursement was designed to reward teachers bonus payments for the conditions under which they taught but not for how they taught.²³ According to Jordon and Borkow:

Incentive pay proposals have been formulated under the following set of premises:

1. Financial incentives have a positive impact on the supply, turnover, and distribution of teachers;
2. Incentive pay will have a positive effect on student performance; and
3. Incentive pay will have a positive effect on teacher morale and performance.²⁴

During 1983, members of the Florida legislature authorized local school systems to provide financial incentives to teachers for outstanding attendance and for employment in critical shortage subject areas. Furthermore, salary supplements were awarded for superior teaching evaluations, and for higher than predicted student achievement gains. The state legislators did not specify the amount of financial rewards to be given. Eligibility for incentive pay in Florida required at least one year

²³Jordon and Borkow, p. 10.

²⁴Jordon and Borkow, pp. 11-12.

of teaching experience, specified that the teacher be a full-time, certificated employee, and had completed no less than ten semester hours of graduate coursework or its equivalent.²⁵

Represented in the Second Mile Plan of the Houston Independent School District was an example of an incentive pay plan on the local school district level. Under the terms of this plan, a teacher's annual salary was increased by as much as six thousand dollars.²⁶ According to Say and Miller, administrators of the Houston Independent School District had four major concerns regarding the quality of the educational services in the city of Houston. To improve instruction, teachers were to be rewarded for student progress measured by standardized tests. Teacher turnover was high in inner-city schools. Because student achievement was highly correlated with staff stability, teachers who staffed inner-city schools received additional salary stipends. Serious teacher shortages existed in the subject areas of mathematics, science, special education, and bilingual education. As the school district was potentially liable for failing to meet the educational needs of all students, financial incentives were offered to teachers who held certificates

²⁵Memorandum and copies of SB 36B (1983 Regular Session of the Florida Legislature) and SB 2C (1983 Special Session) from Neal H. Berger, Legislative Analyst, Florida House of Representation, August 4, 1983.

²⁶The Second Mile Plan, p. 9.

in specific subject areas. Finally, the developers of the Second Mile Plan believed that to promote teaching as a rewarding career, financial and emotional incentives had to be appropriated.²⁷

Under the terms of this plan, to qualify for incentive salary supplements, the teacher had to:

- 1) hold a valid teaching certificate or permit appropriate to the teaching assignment; 2) be assigned to a school or instructional site; 3) be a certified teacher with a bachelor's, master's, or doctoral degree; 4) have an acceptable rating on the most recent evaluation (or on the pre-assessment for first year teachers); 5) have five or fewer days of absence during the current school year; 6) have no unexcused absences; and 7) be a full-time teacher, nurse, or media specialist.²⁸

Included in the Houston Second Mile Plan were seven categories for incentive pay. The first of these categories was service in a high priority or disadvantaged area. The stipend for this service during the 1981-82 school year was two thousand dollars. Teacher shortage areas, or category two, yielded salary supplements determined by the specific subject area.

The third incentive category included teacher attendance. Between fifty and five hundred dollars was accumulated if the teacher was absent five or fewer days during the school year. Professional growth earned a

²⁷Elaine Say and Leslie Miller, "The Second Mile Plan," Phi Delta Kappan, 64 (1982), 270.

²⁸Say and Miller, p. 271.

teacher up to four hundred dollars for completed course work or district inservice education. These stipends were also available to teachers completing certification requirements in teacher shortage areas and reading.

The outstanding educational progress category recognized student progress exceeding statistical predictions as measured by standardized achievement tests. Individual teachers earned eight hundred dollars for student academic achievement. Merit pay for individual schools was also awarded. Those teachers in a school which was in the top ten percent of the school district received four hundred dollars.

The final category included special schools in which achievement testing was not conducted. Following an annual review, stipends of four hundred and fifty dollars to seven hundred and fifty dollars were awarded to each qualifying teacher.

Participation in the Second Mile Plan was voluntary. Each teacher was responsible for applying for each separate stipend. Supplementary salaries were all paid at the conclusion of each school year with the exception of attendance, student progress, and professional growth. These stipends were dispensed at the beginning of the following school year. This policy required eligible staff members to return to the Houston Independent School District for the following school year or forfeit

their incentive pay.²⁹

Another exception to the single salary schedule was the teacher excellence award sponsored by the Minnesota Business Foundation. Supporters of this award believed that all teachers would benefit from the recognition of one outstanding teacher as such an award focused public attention on the schools. Teacher excellence awards were developed according to the following assumptions:

1. Public recognition of a limited number of outstanding teachers will have a positive impact on the morale and performance of schools and their teaching staffs.
2. Private participation in these programs will increase the level of public support for the schools; and
3. Objective and equitable procedures for the selection of the award recipients can be developed and implemented.³⁰

The Minnesota Business Foundation awarded four thousand dollars to each of the eight teachers identified as outstanding educators in the state of Minnesota. These teachers were evaluated by three separate groups comprised of individuals outside the field of education. Specific criteria for excellence included the creative use of resources, curriculum, and classroom management. In addition, these outstanding teachers had a thorough knowledge of the subject matter, and they had the ability to excite students to learn. Members of the foundation

²⁹Say and Miller, p. 271.

³⁰Jordon and Borkow, p. 14.

defined excellent teachers as those educators who objectively demonstrated the American way of life, democracy, and free enterprise.³¹

An increasingly popular alternative to the single salary schedule was differentiated staffing. Advocates of this alternative believed in the individual differences of the teacher. Bishop and Carleton wrote of the necessity to discover ways in which to differentiate between good and bad teachers. The present salary scale indicated that all teachers were alike and were performing the same duties. Furthermore, teachers were rewarded for good teaching by promotion to administrative positions. They proposed a career ladder of seven to nine steps which satisfied instructional careers relating to the classroom.³² The master teacher and the teacher specialist were the highest steps on the career ladder. A master teacher held a master's degree and demonstrated both responsibility and leadership in the classroom. Specific responsibilities of this position included training teacher interns, serving on curriculum committees, providing leadership in school faculty organizations, assisting

³¹Joyce Krupey, "A Gift for Excellence," American Education, 18 (1982), 10-12.

³²Lloyd K. Bishop and Patrick W. Carlton, "Staff Differentiation: A Model for Developing Professional Behavior," in The Management of Educational Personnel, ed. Louis Romano et al. (New York: MSS Information Corporation, 1968), p. 152.

with research projects, and evaluating faculty members in other teacher categories. The teacher specialist completed a doctoral degree or its equivalent in postgraduate courses and demonstrated proficiency in at least one subject area. This position required the teacher to work district wide in program planning. As a specialist, the teacher conducted research and developed inservice education for teacher interns. The evaluation of teachers in other categories was also required.³³

Dempsey and Smith supported the differentiated staffing concept stating that "differentiated staffing seeks to put to best advantage the unique abilities of a teacher through a teacher hierarchy with a salary equal to job responsibility."³⁴ According to English, differentiated staffing improved the quality of instruction by separating teacher tasks and allowing for increased teacher specialization.³⁵ Ogletree and Kuzminski concluded that students benefitted from differentiated staffing as the restructuring of teacher responsibilities increased

³³Bishop and Carleton, p. 164.

³⁴Dempsey and Smith, p. 6.

³⁵Fenwick W. English, "Differentiated Staffing: Reform or Revolution," in Differentiated Staffing, ed. James A. Cooper (Philadelphia: W.B. Saunders, 1972), p. 31.

the potential for individualized instruction.³⁶

As indicated in the research on differentiated staffing, master teacher proposals were based on the following assumptions:

1. Teachers deserve additional financial and professional rewards;
2. Excellence in teaching performance can be measured; and
3. Overall student performance can be raised by a program of differentiated pay in which "master teachers" have responsibility for evaluating and assisting other teachers.³⁷

A significant factor in the success of differentiated staffing proposals was peer evaluation because it increased the credibility of teaching as a profession. Caldwell stated: "Change agents such as master teachers in differentiated staffing are selected by peers, are fulfilling functions specified by their peers, and are evaluated relative to their performance."³⁸ Rand concluded that teachers were capable of making evaluative judgments about each other's performance. In this manner, supervision was viewed as a service function rather than a threat to the teaching performance:

³⁶Eral J. Ogletree and Edward Kuzminsi, Differentiated Staffing: Pros and Cons (ERIC ED 191 132), p. 7.

³⁷Jordon and Borkow, p. 20.

³⁸Bruce Caldwell, Differentiated Staffing--The Key to Effective School Organizations (New York: The Center for Applied Research in Education, 1973), p. 91.

Teachers are viewed as sufficiently trained and mature adults who can make responsible judgments about the competency of their work. To abdicate this responsibility is to leave it to others. As long as teachers fail to assume their own self-regulation, a great deal, if not all, of professional autonomy, independence, and authority will be out of their hands. Other professional groups jealously guard this responsibility as one of the hallmarks of professionalism, and rightly so. The power to regulate is the power of control.³⁹

Dempsey and Smith maintained that the involvement of teachers in the decision making process allowed for teachers to police and to regulate their own profession.⁴⁰ Darling-Hammond and Wise reported that peer evaluation raised the quality of supervision and allowed teachers to exercise control over their profession. They claimed that the title master teacher automatically implied additional duties. In their words, "The title constituted a judgment by other teachers that he or she has already achieved that standard of practice and is capable of carrying out the designated function."⁴¹ Furthermore, they stated that the title master teacher represented "a standard of professional teaching practice . . . defined within the profession by those selected by the teacher

³⁹M. John Rand, "A Case for Differentiated Staffing," in Differentiated Staffing, ed. James A. Cooper (Philadelphia: W.B. Saunders, 1972), p. 50.

⁴⁰Dempsey and Smith, p. 7.

⁴¹Linda Darling-Hammond and Arthur E. Wise, "Teaching Standards or Standardized Teaching?," Educational Leadership, 4 (1983), 68.

cadre to represent that standard."⁴²

State legislators in Florida and California enacted differentiated staffing plans at a state level. The Florida Merit Compensation Program was designed for the appointment of associate master teachers and master teachers. Educators in individual school districts designed differentiated staffing programs to meet the unique needs of each school system. Members of the state board of education adopted rules concerning program administration, eligibility requirements, and financial incentives. The criteria for the selection of an associate master teacher included four years of teaching with at least two years of teaching experience in the state of Florida; the teacher had to be on a continuing contract; the teacher had to have superior performance evaluations; the teacher had to have an outstanding, documented attendance record; and the teacher had to pass a subject area examination. The master teacher had to complete seven years of teaching experience with five years of teaching experience in the state of Florida; the teacher had to be on a continuing contract and had to have completed three years as an associate master teacher; and fifteen hours of graduate work had to be completed. The selection process was conducted at the local level with final

⁴²Darling-Hammond and Wise, p. 68.

approval granted by the Florida Commissioner of Education.⁴³

The California Mentor Teacher Program was developed according to the following rationale: the teaching profession should be satisfying and rewarding; teachers should be encouraged to remain in the profession; educators must continue to pursue education; incentives must be offered to those teachers who have demonstrated both ability and expertise; and the teaching profession must be restored to a position of importance.⁴⁴ Specific qualifications for mentor teacher selection included:

Permanent teaching status . . . substantial recent experience in classroom instruction . . . demonstrated exemplary teaching ability as indicated by . . . effective communication skills, subject matter, knowledge, and a mastery of a range of teaching strategies necessary to meet the needs of pupils in different contexts.⁴⁵

Five percent of all certificated classroom teachers in each school division in California were to be appointed mentor teachers. A mentor teacher received four thousand dollars above the regular annual salary. Monies for these stipends were appropriated to each school district

⁴³Memorandum and Copies of SB 38B (1983 Regular Session of the Florida Legislature) and SB 2C (1983 Special Session) from Neal H. Berger, Legislature Analyst, Florida House of Representatives, August 4, 1983.

⁴⁴California, Education Code, Sec. 44490 (1983).

⁴⁵California, Education Code, Sec. 44491 (1983).

by the state superintendent of schools.⁴⁶

The duties of the mentor teacher were similar to those of the master teacher. Mentor teachers provided assistance and guidance to both new and experienced teachers. They planned inservice education and initiated curriculum projects. At least sixty percent of mentor teacher time was spent in direct instruction of students. Unlike the master teacher, no mentor teacher participated in the evaluation process of other teachers.⁴⁷

During 1983, the governor of Tennessee proposed the Better Schools Program, a comprehensive state education plan. This plan included the Tennessee Master Teacher Program. Under the terms of the Master Teacher Program, teaching certificates were renewed every five years. In conjunction with the four-tiered master teacher plan, a state teaching license was issued according to the following teacher classifications: apprentice teacher, professional teacher, senior teacher, and master teacher. An apprentice teacher became a professional teacher within five years or pursued other employment. Every teacher at the professional teacher level renewed a teaching license every five years or advanced to a higher level

⁴⁶California, Education Code, Sec. 44494 (1983).

⁴⁷California, Education Code, Sec. 44495 (1983).

certificate.⁴⁸ All recommendations for licensing came from the Master Teacher Certification Commission. The Commission was comprised of master teachers, other educators, and lay people.⁴⁹ There were three regional commissions whose members were responsible for the licensure of apprentice, professional, and senior teachers within each respective region. Members of a State Commission granted master teacher certification, considered teacher appeals, and provided professional advice to the Board of Education of the State of Tennessee.⁵⁰

Contained within the Tennessee proposal, were the specific eligibility criteria required for each teacher category. Apprentice teacher certification was determined by student teaching experience and a college degree from an approved teacher education program. In addition, the apprentice teacher had to complete the National Teachers' Examination, but no specific score was required. During a five year period, the apprentice teacher received regular observations and frequent counseling from both senior and master teachers as well as school administrators and supervisors. Advancement to professional teacher status was contingent upon master teacher achievement,

⁴⁸Governor Lamar Alexander, "Better Schools Program" (Presented to the Tennessee Press Association, 28 January 1983), p. 7.

⁴⁹"Better Schools Program," p. 8.

⁵⁰Tennessee Master Teacher Program, Tennessee Department of Education, 1983, p. 5.

a personal interview, a review of professional development activities, and when appropriate, an examination of the teacher's subject areas. Certification at the professional teacher level was renewed every five years following a review of documented successful performance. At this level of certification, the teacher entered into contract with any school division within Tennessee.⁵¹

Achieving senior teacher status required at least three years of teaching experience at the professional teacher level. The senior teacher was an exceptional educator who assumed additional responsibilities. Under the terms of an eleven month contract, the senior teacher developed curriculum materials and conducted inservice education sessions. During the regular school year, these professionals provided leadership, supervision, and counseling to less experienced teachers. Senior teachers were required to spend at least ninety percent of their time as classroom teachers.⁵²

At the top of the certification hierarchy was the master teacher. Classroom effectiveness and demonstrated skill in supervision, evaluation, and the improvement of the professional performance of less experienced teachers were required for master teacher certification.

⁵¹Tennessee Master Teacher Program, p. 1.

⁵²Tennessee Master Teacher Program, pp. 2-3.

Master teachers worked under a twelve month contract. Contained within individual school division contract agreements were the specific responsibilities of master teachers. Duties of the master teacher typically included inservice education, curriculum leadership, training, supervision, and evaluating apprentice teachers throughout the school system. Sixty-five percent of the master teacher's responsibilities included direct instruction to students.⁵³

An example of a differentiated staffing plan at the local district level was the Charlotte- Mecklenburg Schools Career Development Plan. Proposed in the plan was a career ladder which focused on classroom teaching, inservice and curriculum development, and educational research. A beginning teacher remained in a six-year probationary period for extensive professional development before receiving tenure. Members of the state legislature exempted the Charlotte-Mecklenburg School System from the state tenure law which typically granted tenure following three years of satisfactory service. A tenured teacher voluntarily proceeded through a three-level career phase and was awarded salary increments based on the satisfactory completion of each career level. Required in Career Level One were classroom teaching, evaluation of curriculum

⁵³Tennessee Master Teacher Program, pp. 3-4.

Additional responsibilities for Career Level Two teachers included assisting in numerous schools, conducting research, and developing inservice education programs. Curriculum and research specialists were identified in the third career teacher phase.⁵⁴

An alternative to the single salary schedule was merit pay. The controversy over this form of salary reimbursement originated with the negative competition often generated among teachers. Wagoner believed that competition produced excellence in teaching.⁵⁵ Meyer, however, contended that merit pay forced employees into a win-lose situation while competing for financial rewards. The following reactions to merit pay frequently occurred:

- 1) Competitors are seen as enemies, and thus hostility develops toward them.
- 2) Perceptions of one's self become distorted positively, while perceptions of competitors become distorted negatively.
- 3) Interaction and communication with competitors are decreased.⁵⁶

Meyer added that merit pay was detrimental to organizational goals as merit salary increases threatened the self-esteem of employees. Furthermore, employees felt

⁵⁴Charlotte-Mecklenburg Schools Career Development Plan, Charlotte-Mecklenburg Schools, Charlotte, North Carolina.

⁵⁵Roderic L. Wagoner, "The Case for Competition," The Clearing House, 44 (1969), 110.

⁵⁶Hubert H. Meyer, "The Pay-for-Performance Dilemma," Organizational Dynamics, 3 (1975), 42.

discriminated against because they believed that management failed to recognize the professional value of the worker. Consequently, what resulted was a devalued perception of job performance.⁵⁷

Advocates of a merit pay system endorsed these plans based on some of the following assumptions:

1. Teachers should be individually recognized for excellence in performance;
2. Techniques can be devised to measure differences in levels of performance; and
3. Financial incentives based on teacher performance can be used to improve the quality of teachers and classroom instruction.⁵⁸

An example of a merit pay plan was developed by educators of the Round Valley School District in Northern California. A merit point system based on teacher initiative and cooperation allowed teachers to create their own professional objectives and evaluation procedures. In cooperation with the school board, teachers negotiated point values for proposed objectives. There was a ten point maximum yielding a potential merit increase of twenty-eight hundred dollars.⁵⁹

A merit pay system existed in the Catalina Foothills School District in Tucson, Arizona. Emphasized in this

⁵⁷Meyer, p. 44.

⁵⁸Jordon and Borkow, p. 21.

⁵⁹Brian Burke, "Merit Pay for Teachers: Round Valley May Have the Answer," Phi Delta Kappan, 64 (1982), 265-266.

merit pay program was the competence of its administrators to identify outstanding teachers. Teaching excellence was defined as the primary criterion by which a principal recommended a teacher for a merit award. From an evaluation of this merit pay system it was determined that of the twenty-seven merit pay recipients questioned, fifteen claimed that dissension among peers was evident.⁶⁰

Analysis of Proposed Existing Plans

Confirmed in the literature was an extensive history of merit pay plans. The diversity of alternatives to the single salary schedule was manifested in the state and local merit pay and differentiated staffing programs under scrutiny. What was common to each of these plans, however, was the attempt to identify those qualities, characteristics, or attributes of superior teachers.

Despite this attempt, defining teacher excellence has remained a controversial issue. According to Anthony, "there is neither consensus to the type of effect that a teacher termed effective should produce nor conclusive evidence that a given aspect of teachers optimally

⁶⁰Larry S. Frase, Robert W. Hetzel, and Robert F. Grant, "Merit Pay: A Research Based Alternative in Tucson," Phi Delta Kappan, 64 (1982), 266-269.

influences suggested educational outcomes.⁶¹ Young concurred stating that the exact amount of student achievement could not be attributed to any one teacher characteristic. In his opinion, training and experience were the indicators of teaching ability. These qualities, however, did not yield efficiency. Rather, they were measures of potential capacities and abilities of what a teacher was but not what a teacher did. From an analysis of salary schedules, Young concluded that experience, preparation, travel, and experimentation, as well as the ability to conduct research were the attributes of quality teachers.⁶² Administrative evaluations have been the typical means for appraising teacher effectiveness. Members of the New York School Board Association contended that the arduous task of evaluating teacher performance was complicated by the complexity of the teaching role.⁶³ Davis believed that evaluation forms should reflect only those teacher characteristics subject to evaluation. Many evaluation forms included:

⁶¹Bobbie M. Anthony, A New Approach to Merit Rating of Teachers (ERIC ED 027 627), p. 1.

⁶²Lloyd Percy Young, The Administration of Merit Type Salary Schedules (New York: Bureau of Publications Teachers College, Columbia University, 1933), pp. 1-12.

⁶³New York State School Boards Association, Evaluation and Merit Pay Clinics (ERIC ED 089 419), p. 10.

Social relations, instructional skills, personal characteristics, school service, work habits, and pupil results. It has been noted that evaluation forms include such areas as direct service to pupils, community service, non-school activity, and education. While these areas are related to the question of what should be evaluated, they highlight the fact that it is not just teaching which enters into consideration.⁶⁴

Teacher attributes have also been evaluated and categorized according to input and output variables. Jordon and Borkow described input variables as "quantity of educational training, knowledge of subject area, preparation and planning, classroom teaching techniques, attendance record, or even personal appearance." Output variables were listed as "changes in student behavior or attitudes, changes in student achievement, classroom appearance, and student time on task." The researchers added a third variable, environment, contending that a teacher had little direct control over this variable. Input and output variables were to be considered in the context of the socio-economic status of the student, parental and community attitudes, and the availability of instructional materials and equipment.⁶⁵

⁶⁴Hazel Davis, "Evaluation of Current Practices in Evaluating Teaching Competence," in Contemporary Research on Teacher Effectiveness, eds. Bruce Biddle and William J. Ellena (New York: Holt, 1964), p. 61.

⁶⁵Jordon and Borkow, p. 28.

Similarly, Robinson advocated an evaluation system containing both input and output measures. Input variables set a standard of performance for all teachers while output variables indicated a superior teaching performance and increased educational productivity.⁶⁶

Reflected in Table 1, page 48, are those teacher attributes defined in state and local plans. These attributes are categorized according to input and output measures. Identified in the majority of these plans were knowledge of subject matter, graduate study, teaching experience, and teaching techniques, as significant indicators of teaching excellence. Student achievement, however, was represented as a meaningful output variable in only two plans. Therefore, according to Robinson's proposed method of teacher evaluation, merit and incentive pay plans as well as differentiated staffing plans have continued to focus primarily on standard teacher performance rather than on superior teaching effectiveness.

How could the failures and successes of these plans have been useful in an effort to improve the quality of education? What was needed was a method of distinguishing those teachers that were truly exceptional. It was interesting that in all of the programs reviewed in this

⁶⁶Glen Robinson, "Paying Teachers for Performance and Productivity: Learning From Experience," Educational Research Service, 1983, pp. 12-13.

Table 1

Analysis of Teacher Attributes According to Input and Output Variables
of State and Local Plans

Input variables	Florida	California	Tennessee	Houston	Charlotte Mecklenburg
Graduate study	X		X	X	
Knowledge of subject matter	X	X	X		X
Teaching experience	X	X	X		X
Attendance record	X			X	
Teaching techniques		X	X		X
Student motivation					
Staff relations	X	X			X
Output variables	Florida	California	Tennessee	Houston	Charlotte- Mecklenburg
Student achievement	X			X	

study not one of these programs utilized student motivation as a formal criteria in the selection of exceptional teachers. There were problems associated with obtaining a reliable measure of student motivation. For instance, environmental factors, such as a socio-economic status, might have influenced a student's interest in learning. As Katz reported, "In schools where low attainment levels prevail, most pupils should be largely incapable of realistic self-appraisal or intrinsic mediation of achievement satisfaction."⁶⁷

⁶⁷Irwin Katz, "Culture, Child, and School," in Academic Motivation and Educational Opportunity, ed. Maehr and Stallings (Monterey, California: Brooks Cole Publishing Co., 1975), p. 34.